

## **814 CONCRETE CURING MATERIALS AND ADMIXTURES**

### **814.01 BURLAP**

Burlap shall meet the requirements of AASHTO M 182, Class 3.

### **814.02 SHEET MATERIALS**

**(A) POLYETHYLENE SHEETING.** Polyethylene sheeting for curing portland cement concrete shall meet the requirements of AASHTO M 171 and shall be opaque white.

**(B) WATERPROOF PAPER.** Waterproof paper for curing portland cement concrete shall meet the requirements of AASHTO M 171.

**(C) WHITE BURLAP-POLYETHYLENE SHEET.** White burlap-polyethylene sheet for curing portland cement concrete shall meet the requirements of AASHTO M171.

**(D) INSULATION BLANKET.** Insulation blanket used for curing portland cement concrete shall be impervious to water, of uniform thickness and composition, and of a size acceptable to the Engineer for its intended use. A sample of material representative of that proposed for use shall be submitted by the Contractor and approved prior to use.

### **814.03 LIQUID MEMBRANE CURING COMPOUNDS**

**(A)** Membrane curing compound shall meet the requirements of AASHTO M 148, Type 1D with fugitive dye, Class B.

**(B)** For walls, membrane cure shall meet the requirements of AASHTO M 148, Type I, Class B.

### **814.04 AIR ENTRAINING ADMIXTURES**

Materials to be incorporated in PCC to entrain air shall meet the requirements of AASHTO M 154.

### **814.05 CHEMICAL ADMIXTURES**

**(A) ACCELERATOR.** Materials to be incorporated in the PCC mix as an accelerator shall meet the requirements of AASHTO M 194, Type C or E as specified, except that the accelerating admixture shall contain not more than 500 parts per million chloride ion.

Admixtures causing accelerated setting of cement in PCC shall not be used in PCC for sewer-water structures.

**(B) RETARDER.** Materials to be incorporated into the PCC as a retarder shall meet the requirements of AASHTO M 194, Type B or D as specified.

**(C) WATER REDUCER.** Materials to be incorporated in the PCC as a water reducer shall meet the requirements of AASHTO M 194, Type A or D as specified.

High range water reducing admixtures (superplasticizer) shall meet the requirements of AASHTO M 194, Type F.

#### **814.06 COLOR ADMIXTURES**

**(A) CARBON POWDER.** Carbon powder for darkening PCC shall be Carbon Black (concrete grade) in accordance with ASTM C 979. The material shall be such that it will not float and will be uniformly and completely dispersed throughout the plastic PCC.

**(B) OTHER.** Materials other than carbon powder used for coloring PCC shall be as required by the contract documents.